



Thank you for purchasing speedometer, before operating the unit, please read the instruction thoroughly and retain it for the future reference.

## Notice

- DC 12V applications only.
- For installation, please follow the steps described in manual. Any damage caused by wrong installation shall be imputed to the users.
- To avoid the short circuit, please don't pull the wire when installing. Don't break or modify the wire terminal.
- Do not disassemble or change any parts excluding the manual description.
- The interior examination or maintenance should be executed by our professionals.

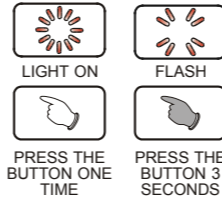
### MARK MEANING:

**NOTE** You could get the installation details from the information behind the mark.

Some processes must be followed to avoid the affection caused by wrong installation.

**WARNING!** Some processes must be followed to avoid damages to yourself or the public.

**CAUTION!** Some processes must be followed to avoid the damage to the vehicle.



## 1-1 Accessory

<b>1</b> LCD meter X 1	<b>2</b> Passive speed sensor X 1	<b>3</b> RPM wire set X 1	<b>4</b> M8/ S type speed sensor bracket X 1
<b>5</b> M10/ S type speed sensor bracket X 1	<b>6</b> Hexagon socket screw X 2	<b>7</b> D6 X 5L mm magnet X 6	<b>8</b> 2.5 mm spanner X 1
<b>9</b> Meter bracket X 1	<b>10</b> Handle bar clamp X 1	<b>11</b> Rubber X 1	<b>12</b> M6 X 10L screw X 1
<b>13</b> M5 X P0.8 nut X 3	<b>14</b> M6 X P1.0 nut X 1	<b>15</b> M5 washer X 3	<b>16</b> M6 washer X 1
<b>17</b> Aluminum bush X 1	<b>18</b> Connect terminal X 9		

**NOTE** Please contact the local distributor if the items you open are not the same, with the above-listed one.

## 2-1 Wiring installation instructions

Dark green—Fuel  
Purple—Neutral(-)  
Orange—Left-turn signal(+12V)  
Blue—Right turn signal(+12V)  
Yellow—High beam(+12V)  
Gray—Warning lamp(-)  
LCD meter (Accessory 1)  
Red / Positive pole (Connect to the battery DC 12V)  
Brown / "+" Wire connect key on DC 12V main power switch  
Black / Ground wire connect to the vehicle body or the engine. (It must be a good ground)Dark brown—RPM Signal wire  
Speed sensor wiring  
Digital speed signal sensor (Accessory 2)  
**NOTE** Speed Sensor is a "Hall Sensor".  
Please choose either Type A or Type B RPM wire according to the need and then follow the instruction below to install at the proper position.  
Magnet (Accessory 7)  
RPM wire set (Accessory 3)  
Main switch wiring reference:

	"+" Color	"-" Color
<b>YAMAHA</b>	Brown	Black
<b>HONDA</b>	Brown	Black
<b>SUZUKI</b>	Black	Green
<b>SYM</b>	Black	Green

**NOTE** The color listed above may differ depending on the model.  
**NOTE** When connecting the power wiring, please follow the instruction. If you connect the red & brown wiring in parallel will cause the meter work improperly.  
**NOTE** When connecting the power wiring, please follow the instruction. If you connect the red & brown wiring in parallel will cause the meter work improperly.  
**NOTE** We provide 2 ways to get the rpm signal-sensor a & sensor b. If there are interruptions, you could change the sensor wiring to get better signal.  
**NOTE** When connecting the power wiring, please follow the instruction. If you connect the red & brown wiring in parallel will cause the meter work improperly.  
**The RPM wire installation**  
Please check the polarity of your ignition coil, before you connect the RPM sensor type B there. An incorrect installation can lead to a defect of the meter or destroy the electrical system of your vehicle.  
**Transistor Ignition:** If your vehicle has a transistor ignition system, connect the tach to the negative pole of the ignition coil.  
**CDI ignition:** If your vehicle has a CDI ignition system, connect the speed sensor to the positive pole of the ignition coil.

## MOTO / SCOOTER S type speed sensor bracket instruction

- Loose the screw on the caliper
- Install the speed sensor.
- Install the S type bracket on the caliper.
- Adjusting the distance between the sensor and screw to get the best speed signal. Please make sure the distance is under 2 mm to get the best signal.
- Please adjust the bracket to the proper angle and then screw it up. Please make sure the disc screw could pass the hole on the bracket for you to install the sensor into the same hole for catching the speed signal.



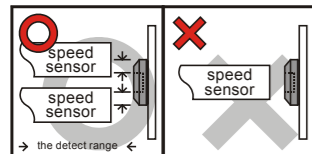
The active speed sensor could be installed by the metal parts to detect the speed.

- EX. 1 The disc screw.
- EX. 2 The disc to detect the disc gap. (Please make sure the distances between the gaps are the same in advance to avoid wrong speed signal.)
- EX. 3 The sprocket to detect the disc gap. (Please make sure the distances between the gaps are the same in advance to avoid wrong speed signal.)

**We will suggest you to catch the speed from the disc screws. The more the sensor points are, the better the speed accuracy is. The maximum sensor points the speed sensor could detect is 20 points per turn.**

⚠ After installation, please use your hand to turn the tire to see is everything ok. The LED on the active speed sensor will light up once the signal is detected.

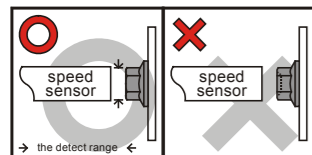
EX. 1



**The hexagon socket disc screw**

The best detect area: The edge of the hexagon socket screw.

⚠ Please don't catch the signal from the middle hole of the hexagon socket screw to avoid wrong signal.

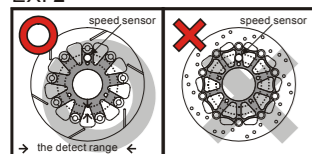


**The hexagon screw**

The best detect area: The middle of the screws.

⚠ Some hexagon screw center is with a small hole in the center in this case, we will suggest you to catch the signal from the edge of the screw like the hexagon socket screw.

EX. 2

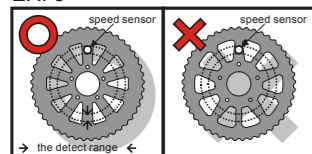


**The disc**

The best detect area: Please detect the speed signal from the gaps of the disc.

⚠ Please note that there are discs with the gaps in different difference, and this method will not work on it!

EX. 3



**The sprocket**

The best detect area: Please detect the speed signal from the gaps of the sprocket.

⚠ Please note that there are sprockets with the gaps in different difference, and this method will not work on it!

### 3-1 Basic function instruction

**Tachometer**  
● Display range: 10,000 RPM

**Telltails**  
● High beam (Blue)   
● Neutral (Green)   
● Reserve (RED)   
● Repeater (Green)   
● RPM Shift light (RED)



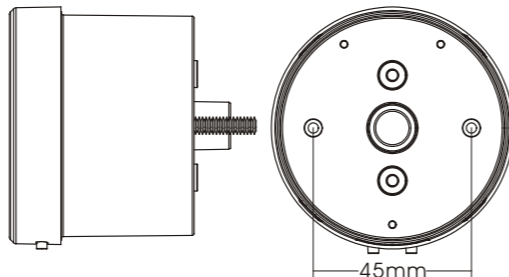
**Speedometer**  
● Display range: 0~360 km/h (0~225 MPH)  
● Display unit: km/h & MPH for alternative

**Odometer**  
● Display range: 0~99,999 km (mile), reset automatically after 99,999 km (mile)  
● Display unit: 1 km (mile)

**Clock**  
● 24 H

**Trip meter**  
● Display range: 0~9999.9 km (mile), reset automatically after 0~9999.9 km (mile).  
● Display unit: 0.1 km (mile).

**Fuel meter**  
● Display range: 0~100%.  
● Display unit: 1%.



### 3-2 Function, setting instruction

● Speedometer	Display range: 0~360 km/h (0~225 MPH) Display unit: km/h & MPH or alternative	○ Max. RPM record	Display range: 0~10,000 RPM
○ Display internal	<0.5 second	● Fuel meter	Display range: 0~100% Display unit: 1%.
○ Odometer	Display range: 0~99999 km (mile), reset automatically after 99999 km (mile) Display unit: 1 km (mile)	○ Insufficient fuel warning	Setting unit: 100 Ω, 250 Ω, 510 Ω, USER
○ Trip meter A . B	Display range: 0~9999.9 km (mile), reset automatically after 0~9999.9 km (mile). Display unit: 0.1 km (mile).	● Clock	24 H
○ Top speed record	Display range: 0~360 km/h (0~225 MPH)	● Backlight brightness	Setting range: 1-5 (Darkest)~5-5 (Brightest) Setting unit: Each level represents 20%
○ Tire circumference	Setting range : 300~2,500 mm Sensor point: 1~20 • Setting unit : 1	● Effective voltage	DC 12v
● Tachometer	Display range: 10,000 RPM	● Effective temperature range	-10~+60 °C
○ The shift light	Setting range: 5000~20000 RPM Setting unit: 100 RPM	● Meter standard	JIS D 0203 S2
○ Warning	F-OFF (LIGHT ON) • F-ON (FLASH)	● Meter size	85.5 X 54.5 mm
○ RPM input pulse	Display range: 0.5, 1~6	● Meter weight	Around 330 g
○ The RPM input pulse	setting range: Hi-ACT (Positive wave pulse) Lo-ACT (Negative wave pulse)	● Telltails	High beam (Blue) Neutral (Green) Reserve (RED) Repeater (Green) RPM Shift light (RED)

**NOTE** Design and specification are subject to change without notice!

### 3-3 Function switch instruction

#### ● Select button function instruction



● In RPM screen, Press the Select button once to switch function from ODO to Max. RPM record.



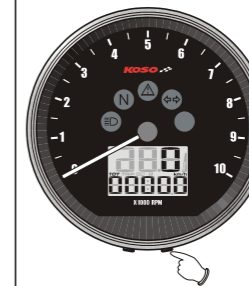
● In Max. RPM record screen, Press the Select button once to switch from the Max. RPM record function to the main screen.

● Hold pressing the Adjust button for 3 seconds to reset the Max. RPM record.

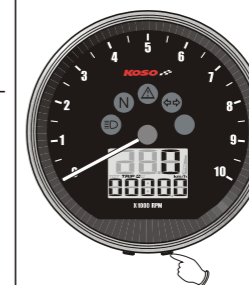


● The RPM screen.

#### ● Adjust button function instruction

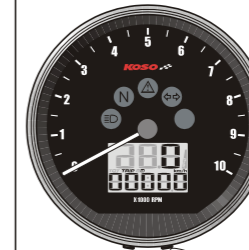


● In ODO screen, press the Adjust button once to switch the function from ODO meter to trip A.



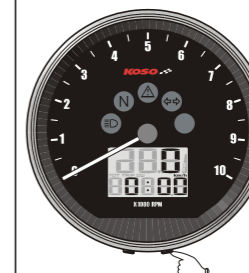
● In trip A screen, press the Adjust button once to switch from trip A to trip B

● Hold pressing the Adjust button for 3 seconds to reset the trip A.

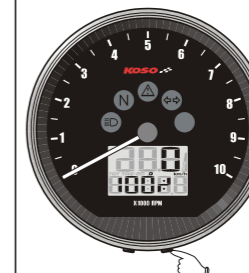


● In trip B screen, press the Adjust button once to switch from trip B to clock screen.

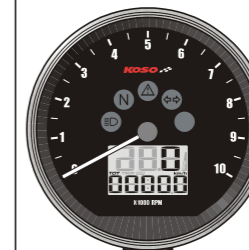
● Hold pressing the Adjust button for 3 seconds to reset the trip A.



● Adjust In clock screen, press the button once to switch from clock to fuel screen.



● Adjust In fuel screen, press the button once to switch from fuel to ODO screen.



● The ODO screen.

## 4 Function setting instruction



- In main screen, hold pressing the Select + Adjust button for 3 seconds to enter the setting screen.

### 4-1 Speed unit setting

- Press the Select button one time to enter the speed unit setting



- EX. To change the setting from km/h to MPH.
- Press the Adjust button to change the setting.

**NOTE** Default: km/h

▲ Now the default is flashing

**NOTE** Setting range: km/h or MPH.

**NOTE** The odometer & trip meter will change together with the speed unit.



- Press the Select button once to go back to the Speed unit setting screen.
- EX. The Speed unit setting is changed from km/h to MPH.



- Press the Adjust button once to go back to the tire circumference and sensor point setting screen.



### 4-2 The tire circumference and sensor point setting.

- Press the Select button one time to enter the tire circumference setting



- EX. The tire circumference is 1,300 mm.
- Press the Select button to move to the digit you want to set.

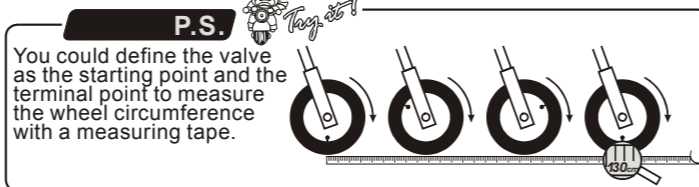
**NOTE** Default: 1,000 mm

▲ Now the default is flashing

**NOTE** The tire circumference setting range: 300~1,000 mm, and the digit you set is from left to right in order.

#### CAUTION!

- Please measure the tire circumference (the tire you will install the sensor on) and make sure the number of magnet sensor point (You could install the magnet into the disc screw or the sprocket screw.)
- The speed displayed on the meter will be affected by the setting, please make sure the setting number is correct before you make the setting.



- Press the Adjust button to choose the setting number.



- Press the Select button once to go back to the sensor point setting screen.
- EX. The sensor point setting is changed from 01 P. to 06 P.



- EX. The sensor point you want to set is 6.
- Press the Select button to move to the digit you want to set.

**NOTE** Default: 01P

▲ Now the default is flashing

**NOTE** The sensor point setting range: 1~20 points. You could change the setting from left to right.



- Press the Adjust button to choose the setting number.



- Press the Select button once to go back to the tire circumference and sensor point setting screen.



- Press the Adjust button once to go back to the RPM pulse and input signal setting screen.

### 4-3 RPM pulse and input signal setting

- Press the Select button one time to enter the RPM pulse setting.



- EX. You want to change the current setting value from 1 to 2.
- Press the Adjust button to enter the corresponding value for the RPM signal number per ignition. (Please check the reference table below!)

- EX. The original setting is 1(4C-2P)

**NOTE** The piston type can be set is 0.5,1,2,3,4

The setting value	The corresponding stroke and pistons number	The corresponding RPM signal number per ignition.
0.5	4C-1P	2 RPM signal per 1 ignition.
1	2C-1P 4C-2P	1 RPM signal per 1 ignition.
2	2C-2P 4C-4P	1 RPM signal per 2 ignition.
3	2C-3P 4C-6P	1 RPM signal per 3 ignition.
4	2C-4P 4C-8P	1 RPM signal per 4 ignition.

#### CAUTION!

Some 4 stroke engine with single cylinder also generate 1 ignition signal per revolution of the engine. In this case the setting should be set as same as 2 stroke engine with single cylinder type of bike.

**NOTE** Pvalue is how many ignition signal the engine will generate per revolution (360°)



- EX. The ignition angle setting is changed from 1 to 2 (4C-4P).
- Press Select button to enter the shift light setting screen.



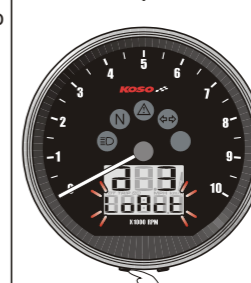
- EX. We would like to change the setting to LoAct. (The negative impulse)
- Press the Adjust button to choose the input signal you want to set.

**NOTE** Default: HiAct

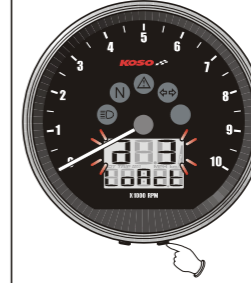
▲ Now the default is flashing

**NOTE** The impulse setting range is between Hi (the positive impulse) & Lo (the negative impulse)

**NOTE** If the tachometer can't detect the signal (No RPM is displayed on the screen), you could choose another setting, and check it again.



- Press the Select button once to go back to the RPM pulse and input signal setting screen.
- EX. The input signal setting is changed from HiAct to LoAct.



- Press the Adjust button once to go back to the shift light and shift light warning setting screen.

### 4-4 Shiftlight setting

- Press the Select button one time to enter the Shift light setting.



- EX: You want the shift light to light on at 8000 RPM Please change the shift light setting value to 8500 directly.
- Press the Select button to move to the digit you want to set.

**NOTE** Default: 8,000RPM

▲ Now the default is flashing

**NOTE** Setting range : 5,000~20,000 RPM  
Setting unit : 100 RPM



- Press the Adjust button to choose the setting number.





- Press the Select button to choose the Shift light setting.
- EX: Now the shift light setting is changed from 8,000RPM to 8,500 RPM.



- EX. You want to set the shift light F-ON (Flash).
- Press the Adjust button to choose the setting number.

**NOTE** Default:F-OFF(Light on)

▲ Now the default is flashing

**NOTE** Setting range: F-OFF(Light on) · F-ON(Flash).



- Press the Select button once to go back to the RPM input signal and shiftlight setting screen.
- EX. The shiftlight setting is changed from F-OFF(Light on) to F-ON(Flash).



- Press the Adjust button to choose the clock setting screen.

#### 4-5 Clock setting



- Press the Select button one time to enter the clock setting.



- EX. To change the setting to 10:00.
- Press the Adjust button to choose the setting number.

**NOTE** Default:0 H.

▲ Now the default is flashing

**NOTE** Setting range: 0~23 H.



- EX. Now the setting is changed from 0:00 to 10:00.
- Press the Select button to enter the minute setting.



- EX. To change the setting to 14:10.
- Press the Select button to move to the digit you want to set.

**NOTE** Default:0 minutes.

▲ Now the default is flashing

**NOTE** Setting range: 00~59 minutes.



- Press the Adjust button to choose the setting number.



- Press the Select button once to go back to the clock setting screen.
- EX. Now the setting is changed from 14:00 to 14:10.



- Press the Adjust button to choose the backlight setting screen.

#### 4-6 Backlight setting



- Press the Select button one time to enter the backlight setting.



- EX. You want to set the backlight at 3-5 (60%).
- Press the Adjust button to choose the setting number.

**NOTE** Default:5-5

▲ Now the default is flashing

**NOTE** Setting range:1-5(Darkest)~5-5 (Brightest),5 different levels available. Setting unit:20% per level. The backlight brightness will change immediately after you set the value.



- Press the Select button one time to enter the backlight setting.
- EX:The backlight setting setting is changed from 5-5 (100%) to 3-5 (60%).



- Press the Adjust button to choose the fuel gauge resistance setting screen.



#### 4-7 Fuel gauge resistance settings

- Press the Select button to enter the fuel gauge resistance setting screen.



- EX.If the vehicle is a YAMAHA T-MAX 530 ; it's resistance is 100Ω according to the service manual.
- Press the Adjust button to choose the setting number.

▲ Now the setting value is flashing!

**NOTE** The fuel gauge resistance setting range:USER, 100 Ω,250 Ω,270 Ω, 510 Ω,1200 Ω,SW (turn off)

**NOTE** Custom fuel level resistance:  
1.Manual - Please check 4-2-1 Fuel Level Resistance Manual Setting Instructions.  
2.Auto - Please check 4-2-2 Fuel Level Resistance Auto Setting Instructions.



- Press the Select button to go back to the fuel gauge resistance setting screen.
- EX. Now the fuel gauge resistance setting from USER to 100Ω .

#### 4-7-1 Fuel Level Manual Setting



- Press the Select button to enter the lowest fuel level's resistance setting screen.
- EX:For YAMAHA T-MAX 530,according to the service manual, the fuel ank resistance from low to high is 90 - 100 Ω (the lowest) and 4 - 10 Ω (the highest).So enter the setting value as 10 Ω .

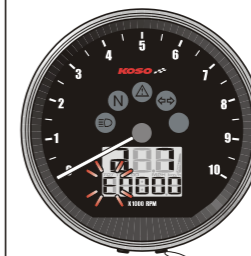
**P.S.**



- You could find your fuel level sensor resistance range in the electronic components section in the service manual.



- Normally, we will recommend to choose the closest number set as the range to ensure that riders will not run out of gas before the fuel level indication. example, for YAMAHA T-MAX it is 90 - 100 Ω and 4 - 10 Ω , in which case we will suggest to use 90 - 10 Ω as the lowest and highest range.



- EX:If the lowest fuel level is 90 Ω .
- Press the Select button to the digit you want to set.

▲ Now the default is flashing

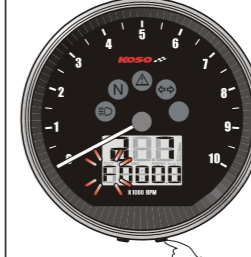


- Press the Adjust button to choose the setting number.



- Press the Select button twice to enter in the highest fuel level's resistance setting screen.

- EX. The lowest fuel level setting is changed from 0 to 90 Ω .



- EX.If the highest fuel level is 10 Ω .
- Press the Select button to the digit you want to set.

▲ Now the default is flashing



● Press the Adjust button to choose the setting number.



● Press the Select button twice to go back to the highest fuel level's resistance setting screen.  
● EX. The highest fuel level setting is changed from 0 to 10 Ω.

#### 4-7-2 Fuel level resistance auto detection settings



● Press the Select button to enter the lowest fuel level's resistance auto detection screen.

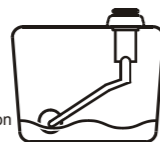
#### CAUTION!

● Before detection, ensure that your current fuel level is in the lowest position that you would like to have.  
● Stop the vehicle for a few seconds to allow the fuel surface to become steady, then start the detection of the resistance.

P.S.

● For example of YAMAHA T-MAX 530, if the fuel surface sensor float in the lowest position then it will detect the resistance around 90 - 100 Ω.

The lowest position



● Press the Adjust button to detect the lowest fuel level's resistance.



● Press the Select button 5 times to enter the lowest fuel level resistance auto detection screen.  
● EX. Auto Detection the lowest fuel level resistance is 90 ohms

#### CAUTION!

● Before detection, please ensure your current fuel level is in the highest position that you would like to have.  
● Stop the vehicle for a few seconds to allow the fuel surface become steady, then start the detection of the resistance.

P.S.

● For example the YAMAHA T-MAX 530; if the fuel surface sensor float is in the highest position then it will detect the resistance as around 4 - 10 Ω .

The highest position



● Press the Adjust button to detect the highest fuel level resistance.



● Press the Select button 5 times to go back to the fuel gauge resistance.  
● EX. Automatically detect the highest fuel level resistance value as 10 Ω.



● Press the Adjust button to enter the odometer display screen.

#### 4-8 Meter Odometer display



● Press the Select button to enter the odometer display screen.



● EX. The internal odometer display is 12500 km.

● Press the Select button once to enter the external odometer setting screen.

⚠ This display only for viewing current mileage on the meter.



● EX. The internal odometer display is 12500 km.

● Press the Select button once to enter the external odometer setting screen.

⚠ This display only for viewing current mileage on the meter.

#### 4-9 Meter Odometer setting



● Press the Select button once to enter the external odometer setting screen.



● EX. Set the odometer to 5000 km.  
● Press the Select button to move to the digit you want to set.

**NOTE** Default: 00,000km(mile)

⚠ Now the default is flashing

**NOTE** Display range : 0~99,999 km (mile)



● Press the Adjust button to choose the setting number.

#### 5 Trouble shooting

The following situation do not indicate malfunction of the meter. Please check the following before taking it in for repair.

Trouble	Check item	Trouble	Check item
The meter doesn't work when the power is on.	<ul style="list-style-type: none"> <li>● The power doesn't supply to the meter.               <ul style="list-style-type: none"> <li>→ Please make sure the wiring is connected. The wiring and fuse are not broken.</li> <li>→ The battery is broken or the battery is too old to supply enough power <b>DC 12V</b> to make the meter work.</li> </ul> </li> </ul>	The clock is incorrect.	<ul style="list-style-type: none"> <li>● Do you connect the wiring correctly.               <ul style="list-style-type: none"> <li>→ Please check the positive wire (Red) connects to the battery, and main switch positive wiring (Brown) connects to the main switch.</li> </ul> </li> <li>● Please check your setting.               <ul style="list-style-type: none"> <li>→ Please refer to the manual a5.</li> </ul> </li> </ul>
Speed does not appear or appear incorrectly.	<ul style="list-style-type: none"> <li>● Please make sure the speed sensor is connected correctly.</li> <li>● Please check the tire-size setting.               <ul style="list-style-type: none"> <li>→ please refer to the manual a2.</li> </ul> </li> <li>● Please check the RPM sensor wiring is connected correctly.</li> </ul>	Backlight doesn't work or doesn't have enough brightness	<ul style="list-style-type: none"> <li>● The harness connection might be wrong               <ul style="list-style-type: none"> <li>→ Please check the backlight wire is properly connected according to the instruction.</li> </ul> </li> <li>● Please check your setting.               <ul style="list-style-type: none"> <li>→ Please refer to the manual a6.</li> </ul> </li> </ul>
Tachometer does not appear or appear incorrectly.	<ul style="list-style-type: none"> <li>● Please check the spark plug is R type or not. If not, please replace the spark plug with the R type spark plug.</li> <li>● Please check your setting.               <ul style="list-style-type: none"> <li>→ Please refer to the manual a3.</li> </ul> </li> </ul>	Telltale doesn't work	<ul style="list-style-type: none"> <li>● The harness connection might be wrong               <ul style="list-style-type: none"> <li>→ Please check the harness wire is properly connected according to the instruction.</li> </ul> </li> </ul>

※If still can't solve the problems according to the steps above, please contact with distributors or us.



● Press the Select button once to go back to the Meter Odometer screen.  
● EX. The odometer setting has been changed from 0 km to 5,000 km.  
● Press the Adjust button X3 seconds to go back to the main screen.



● The main screen.